



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,061	08/24/2001	Lawrence Howell Sawyer	KCC-16,208	1730

35844 7590 03/16/2005

PAULEY PETERSEN & ERICKSON  
2800 WEST HIGGINS ROAD  
HOFFMAN ESTATES, IL 60195

EXAMINER

ANDERSON, CATHARINE L

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SN

<b>Office Action Summary</b>	<b>Application No.</b> 09/939,061	<b>Applicant(s)</b> SAWYER ET AL.	
	<b>Examiner</b> C. Lynne Anderson	<b>Art Unit</b> 3761	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 November 2004 and 04 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39, 57, 58, 60, 61 and 63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39, 57, 58, 60, 61 and 63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 November 2004 has been entered.

### ***Claim Rejections - 35 USC § 112***

Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74

Art Unit: 3761

(Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 10 and 11 recite the broad recitation of an absorbent capacity of greater than 16 g/g and greater than 18 g/g, respectively, and the claims also recite, as disclosed in claim 1, an absorbent capacity of between 14 and 40 g/g, which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, 15-30, 34-36, 58, 60, 61, and 63 are rejected under 35

U.S.C. 102(b) as being anticipated by Laux et al. (5,827,259).

Laux discloses an absorbent pad 48 comprising a single layer, as shown in figure 2. The absorbent pad 48 comprises between 30% and 85% superabsorbent material homogeneously mixed with between 15% and 70% pulp fluff, as disclosed in column 19, lines 50-65. The absorbent pad 48 has a density greater than about 0.28 g/cc, as disclosed in column 20, lines 1 and 15-17, and a thickness of less than 5 mm, as disclosed in column 20, lines 9-13. The absorbent pad 48 has an absorbent capacity of between about 14 and 40 g/g, as disclosed in column 19, lines 27-31. Since the absorbent pad 48 disclosed by Laux is comprised of the same materials as the claimed invention, and has the same density, thickness, and absorbent capacity, it is inherent that the edge compression of the absorbent pad 48 will be the same as the claimed invention. Laux therefore discloses an absorbent pad that fulfills all limitations of the claim. With respect to the limitation disclosing the absorbent pad has been compacted to a density of greater than about 0.28 g/cc, it is noted that the claim is drawn to an

Art Unit: 3761

article of manufacture not a method of forming the article. The limitation of compacting the article is a product by process limitation. The absorbent pad disclosed by Laux provides the identical structure disclosed in the claim, and therefore fulfills the limitations of the claim.

With respect to claims 2 and 3, the absorbent pad 48 has a density greater than about 0.32 g/cc, as disclosed in column 20, lines 1 and 15-17.

With respect to claims 4 and 5, the absorbent pad comprises between 40% and 80%, and between 50% and 75% superabsorbent material, as disclosed in column 19, lines 50-65.

With respect to claim 6, the absorbent pad 48 further comprises a plurality of man-made fibers, as disclosed in column 18, lines 26-28.

With respect to claim 7, the absorbent pad 48 further comprises carrier particles, as disclosed in column 18, lines 26-28.

With respect to claims 8 and 9, the absorbent pad 48 is less than 5 mm thick, which includes the ranges of between 0.6 and 2.5 mm, and 0.7 and 2.0 mm.

With respect to claims 10 and 11, the absorbent pad 48 has an absorbent capacity of at least 16 g/g, as disclosed in column 19, lines 27-31.

With respect to claims 15-20, the absorbent pad 48 is present in an absorbent article, diaper, training pant, feminine hygiene product, incontinence product, and is capable of being used as a swim garment, as disclosed in column 2, lines 48-60.

With respect to claim 21, the absorbent material forms a gradient within the absorbent pad 48, as disclosed in column 18, lines 5-7.

Art Unit: 3761

With respect to claims 22 and 23, the absorbent pad comprises between 40% and 80%, and between 50% and 75% superabsorbent material, as disclosed in column 19, lines 50-65.

With respect to claim 24, the absorbent pad 48 further comprises a plurality of man-made fibers, as disclosed in column 18, lines 26-28.

With respect to claim 25, the absorbent pad 48 further comprises carrier particles, as disclosed in column 18, lines 26-28.

With respect to claims 26 and 27, the absorbent pad 48 is less than 5 mm thick, which includes the ranges of between 0.6 and 2.5 mm, and 0.7 and 2.0 mm.

With respect to claims 28-30 the absorbent pad 48 has an absorbent capacity of between 14 and 40 g/g, and at least 16 g/g, as disclosed in column 19, lines 27-31.

With respect to claim 34, the absorbent pad 48 includes more superabsorbent material at a first end than at a second end, as disclosed in column 20, lines 42-44.

With respect to claim 35, the absorbent pad 48 includes more superabsorbent material along a top surface, as disclosed in U.S. Patent 4,699,823 and incorporated by reference in column 18, lines 13-16.

With respect to claim 36, the absorbent pad 48 includes more superabsorbent material along a bottom surface, as disclosed in column 18, lines 8-13.

With respect to claim 58, the absorbent pad 48 is encompassed by a wrap sheet 70.

With respect to claim 60, the absorbent pad 48 is formed in a specific shape, as shown in figure 1.

Art Unit: 3761

With respect to claim 61, the absorbent pad 48 is encompassed by a wrap sheet 70.

With respect to claim 63, the absorbent pad 48 is formed in a specific shape, as shown in figure 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laux et al. (5,827,259) as applied to claims 1 and 21 above, and further in view of Coles (5,722,967).

Laux discloses all aspects of the claimed invention but remains silent as to the gel strength of the superabsorbent material.

Coles discloses a superabsorbent material for use in an absorbent pad having a gel strength of at least 0.85, as described in column 7, lines 6-9. Superabsorbent materials having a high gel strength are well-known to be highly stable. It would therefore be obvious to one of ordinary skill in the art at the time of invention for the superabsorbent material of Laux to have a gel strength of at least 0.85, as taught by Coles.

Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laux et al. (5,827,259) as applied to claim 21 above.

Art Unit: 3761

Laux discloses all aspects of the claimed invention but remains silent as to the variation of concentration of the superabsorbent material. It would have been obvious to one of ordinary skill in the art at the time of invention to vary the concentration of superabsorbent by about 0.15 to about 0.25 g/cc, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laux et al. (5,827,259) as applied to claim 1 above, and further in view of Pieniak et al. (5,451,442).

Laux discloses all aspects of the claimed invention with the exception of the absorbent pad having a higher basis weight in a first zone than in a second zone.

Pieniak discloses an absorbent pad 14, as shown in figure 4, comprising compressions 40. The absorbent pad 14 has a reduced thickness and basis weight at compressions 40, as disclosed in column 7, lines 38-39. The compressions 40 act as folding lines to provide the article with an improved and more comfortable fit, as disclosed in column 10, lines 57-65.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the absorbent pad of Laux with the compressions of Pieniak to provide the article with an improved and more comfortable fit.

### ***Response to Arguments***

Applicant's arguments filed 27 November 2004 have been fully considered but they are not persuasive.



Art Unit: 3761

In response to the applicant's argument that Laux fails to disclose a thickness of between 0.5 and 3 mm, and a density of greater than 0.28 g/cc, it is noted that Laux discloses in column 20, lines 11-12, a thickness of not more than about 5 mm. Laux therefore discloses a range of up to 5 mm, and the claimed range of 0.5 to 3 mm falls within the range disclosed by Laux. Given the basis weight disclosed by Laux in column 20, line 1, and the range of thicknesses disclosed in lines 11-12, it is determined that Laux further discloses a combination of basis weight and thickness that results in a density of greater than about 0.28 g/cc.

In response to the applicant's argument that Laux fails to disclose the step of compacting the absorbent pad, it is noted that this step is a product by process limitation. The claim is drawn to the final product, an absorbent pad having a density of greater than 0.28 g/cc. Laux discloses the identical structure as claimed, and therefore fulfills the limitations of the claim, irrespective of the method used to form the article.

In response to the applicant's argument that the compression step disclosed in the instant claims imparts flexibility, which is quantified in terms of edge compression, it is noted that the results given in Table 4 on page 37 of the instant specification, show a link between the density of the pad and the edge compression. Since the absorbent pad of Laux fulfills the limitation of density, it would follow that the pad would exhibit the same edge compression characteristics. The instant specification states on page 36, line 22, and page 37, line 1, that lower compression values can be achieved through various methods including application of heated compaction rolls. The applicant does

Art Unit: 3761

not, however, disclose that compaction of the layer alone is enough to provide a significant difference in flexibility between two absorbent pads having the same mixture of superabsorbent and pulp fluff, the same density, and the same thickness. Therefore, the applicant's arguments are found to be not persuasive.

### ***Conclusion***

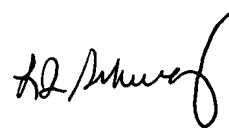
Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CWA  
cla

March 9, 2005



Larry I. Schwartz  
Supervisory Patent Examiner  
Group 3700